



Make Your Own Biodegradable Packing Peanuts

Packing peanuts are made of nearly 100 percent corn. These peanuts are totally water soluble and biodegradable!

Materials:

Package of frozen corn
Iodine
Tablespoon and teaspoon

piece of cheesecloth
paper cups
slotted spoon

potato masher
stir stick
water

Directions:

1. Thaw a package of frozen corn and place in bowl.
2. Crunch up the corn with a potato masher and cover with water. Let stand for 24 hours.
3. Remove from bowl with a slotted spoon. Allow water to stand for another 15 minutes.
4. Gently pour off the water through a piece of cheesecloth, allowing the starch to become trapped in the cloth.
5. You can see and feel the starches left in the cloth. Use a small portion of the cheesecloth to demonstrate the presence of starch. Place a drop of iodine on that portion. If starch is present, the iodine changes from reddish-brown to blue-black. Allow the remainder of the cheesecloth to dry overnight.
6. The starch has now dried overnight and turned into powder. Feel and taste the powder. Now mix 1 tablespoon cornstarch with 1 teaspoon water in a paper cup. Stir with a stick until it forms a workable paste. If you microwave the mixture on high for 15 seconds, it will provide a more consistent product for examination. You have made a biodegradable packing peanut!
7. Study your peanut and compare it to a Styrofoam peanut by putting both into separate glasses of water. Watch what happens. Which peanut would be best for the environment and why? Also try burying them in soil and compare results.